



U M O D P C



Hazardous Material (HAZMAT) Orientation

612-140



References



FM 4-01.011 (Unit Movement Operations)

Code of Federal Regulations - 49 - Transportation
(Parts 100 to 185)

TM 38-250, *Preparing Hazardous Materials for
Military Shipments*

International Air Transport Association - Dangerous
Goods Regulation (IATA DGR)

International Maritime Dangerous Goods Code
(IMDGC)

2000 Emergency Response Guide



Hazardous Material Definition



“A substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety and property when transported in commerce...The term includes hazardous substances, hazardous wastes, marine pollutants...”

Title 49, Code of Federal Regulations



Definition of a HAZMAT Employee



- A hazardous materials employee is any person "...who directly affects hazardous materials transportation safety...
 - Loads, unloads, or handles hazardous material;
 - Prepares hazardous materials for transportation;
 - Is responsible for the safety of transporting hazardous materials; or



Definition of a HAZMAT Employee (Cont)

- Operates a vehicle used to transport hazardous materials.”
- What does this mean to you as UMO and to personnel in your unit? Any one who handles, packages or ships any hazardous material is considered an employee.

Title 49, Code of Federal Regulations



Definition of a HAZMAT Employer

(Cont.)

- A hazardous materials employer is defined as “a person who uses one or more of his employees in connection with:
 - Transporting hazardous materials ...
Causing them to be transported or shipped in commerce...
 - This term includes any department, agency ... of the United States.”



Definition of a HAZMAT Employer (Cont)



- You, as the UMO, become an “employer” when you direct troops to load out a vehicle or container containing HAZMAT.
- Make sure you know what unit personnel must do to correctly handle, package and certify HAZMAT.



HAZMAT Awareness

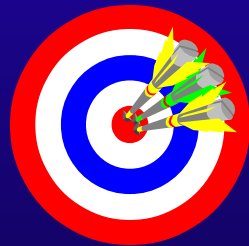


- The minimal level of training established by DOT

requires HAZMAT employees to:
Recognize & identify hazardous materials shipments

Understand the numeric hazard class numbering system

Understand the hazards presented by the nine United Nations (UN) hazard classes & their subdivisions





HAZMAT Awareness (Con't)



- Although the UMO should not be the HAZMAT certifier, the UMO must be aware of dangerous or potentially dangerous materials the unit is handling, shipping or storing
- Something as simple as a variety of consumer commodities could be potentially dangerous
Many "off the shelf" items from WD-40 to aftershave are classified by DOT as "Hazardous Materials"



Shipper's Certification



- Each person (shipper) who offers a hazardous material for shipment shall certify that the material offered is in accordance with the provisions of the applicable CFR 49 subchapter
- The person who certifies the information about the hazardous material must be certified according to CFR 49, para 172.204
(a) (2)



Penalties for Non-Compliance --

Civil

- “Knowingly” violating the regulations

Making an “honest” mistake, i.e. failing to know something that should have been known, or failing to catch the error even if known

For example, one shipment has an incorrect label

- Fine: \$250 to \$27,500 dollars per day per every error or violation (para 107.329)



Penalties for Non-Compliance -- Criminal

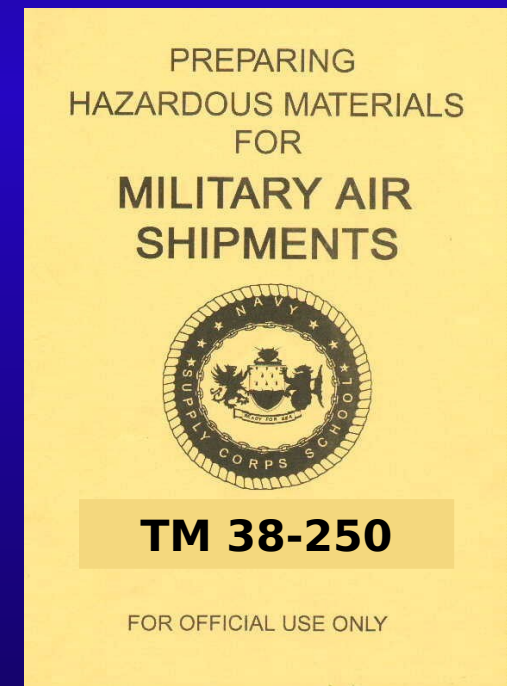
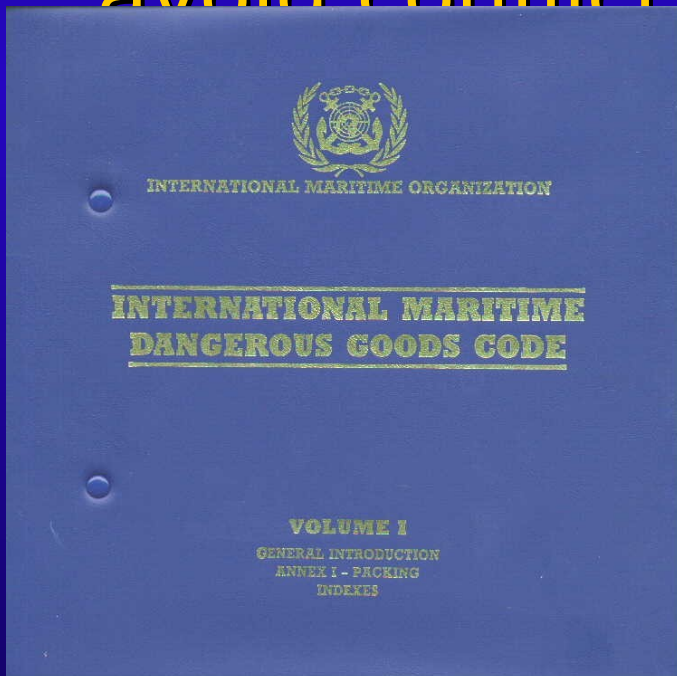
- “Willfully” violating the regulations
Making a conscious decision not to follow the rules
+ Example: Deliberately concealing or mis-declaring a shipment of hazardous material
- This is a *felony* offense & could result in fines of up to \$500,000 per day or up to 5 years in prison (para 107.333)



Regulation Conflicts



- Always consult regulation for specific mode of transportation to be used to avoid conflicts

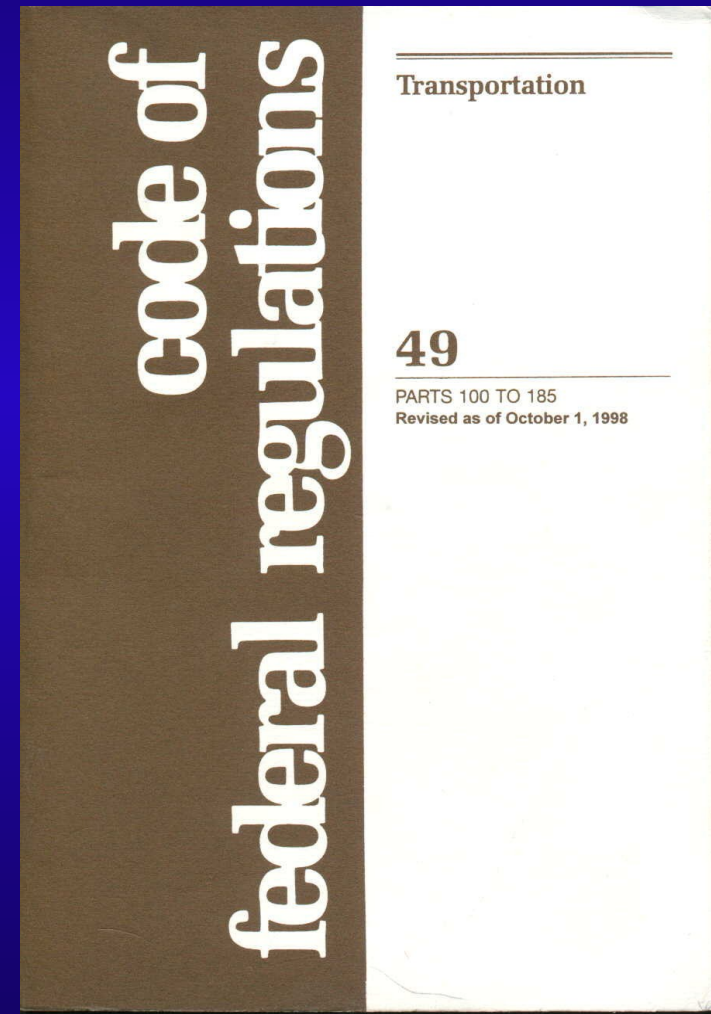




CFR 49



- Code of Federal Regulations for the transportation of hazardous material
- This publication is commonly referred as CFR 49





CFR 49 (Cont)



- Useful paragraphs:
 - Para 171.8, Definitions & Abbreviations
 - Para 172.101, Hazardous Materials Table
 - Para 172.102, Special Provision
 - Para 172.200, Shipping Papers
 - Para 172.204, Shipper's Certification
 - Para 172.300, Marking
 - Para 172.400, Labeling



CFR 49 (Cont)



- Useful paragraphs:
 - Para 172.500, Placarding
 - Para 172.600, Emergency Response Information
 - Para 172.700, Training
 - Part 173, General Requirements
 - Part 174, Rail
 - Part 175, Aircraft
 - Part 176, Vessel
 - Part 177, Highway



CFR 49 -- Hazardous Material Table



§ 172.101 HAZARDOUS MATERIALS TABLE

Sym- bols	Hazardous materials descrip- tions and proper shipping names	Hazard class or Di- vision	Identifica- tion Num- bers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stow- age	
							Excep- tions	Non- bulk	Bulk	Passenger aircraft/rail	Cargo air- craft only	Loca- tion	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
D	Accellerene, see p-Nitrosodimethylaniline.	.....			.....		.....	.....	.....	.....	.....
	Accumulators, electric, see Batteries, wet etc.	.....			.....		.....	.....	.....	.....	.....
	Accumulators, pressurized, pneumatic or hydraulic (containing non-flammable gas).	2.2	NA1956		2.2		306	306	None ..	No limit	No limit	A	
	Acetal	3	UN1088	II	3	T7	150	202	242	5 L	60 L	E	
A	Acetaldehyde	3	UN1089	I	3	A3, B16, T20, T26, T29	None ...	201	243	Forbidden	30 L	E	
	Acetaldehyde ammonia	9	UN1841	III	9		155	204	240	200 kg	200 kg	A	34
	Acetaldehyde oxime	3	UN2332	III	3	B1, T8	150	203	242	60 L	220 L	A	
	Acetic acid, glacial or Acetic acid solution, with more than 80 percent acid, by mass.	8	UN2789	II	8, 3 ...	A3, A6, A7, A10 B2, T8	154	202	243	1 L	30 L	A	
	Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass.	8	UN2790	II	8	A3, A6, A7, A10, B2, T8	154	202	242	1 L	30 L	A	
	Acetic acid solution, with more than 10 percent and less than	8	UN2790	III	8	T8	154	203	242	5 L	60 L	A	

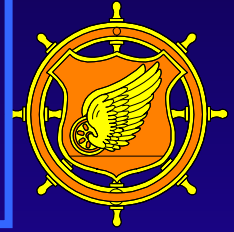
Sym-bols	Hazardous materials descrip-tions and proper shipping names	Hazard class or Di- vision	Identifica- tion Num- bers	PG	Label Codes	Special provisions
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Acetone	3	UN1090	II	3	2, A3, B9, B
	Acetone cyanohydrin, stabilized	6.1	UN1541	I	6.1	B32, B76, B N34, T38, T
	Acetone oils	3	UN1091	II	3	T7, T
	Acetonitrile	3	UN1648	II	3	T
	Acetyl acetone peroxide with more than 9 percent by mass active oxygen.	Forbidden			.....
	Acetyl benzoyl peroxide, solid, or with more than 40 percent in solution.	Forbidden			.....

1 HAZARDOUS MATERIALS TABLE

Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
		Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	Location (10A)	Other (10B)
.....			
.....			
2.2		306	306	None ..	No limit	No limit	A	
3	T7	150	202	242	5 L	60 L	E	
3	A3, B16, T20, T26, T29	None	201	243	Forbidden	30 L	E	
9		155	204	240	200 kg	200 kg	A	34
3	B1, T8	150	203	242	60 L	220 L	A	
8, 3	A3, A6, A7, A10	154	202	243	1 L	30 L	A	



HAZARDOUS SUBSTANCES TABLE



§ 172.101

49 CFR Ch. I (10-1-99 Edition)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Acetamide	100 (45.4)
Acetamide, N-(aminothioxomethyl)-	1000 (454)
Acetamide, N-(4-ethoxyphenyl)-	100 (45.4)
Acetamide, N-fluoren-2-yl-	1 (0.454)
Acetamide, 2-fluoro-	100 (45.4)
Acetic acid	5000 (2270)
Acetic acid (2,4-dichlorophenoxy)-	100 (45.4)
Acetic acid, ethyl ester	5000 (2270)
Acetic acid, fluoro-, sodium salt	10 (4.54)
Acetic acid, lead (2+) salt	10 (4.54)
Acetic acid, thallium(I+) salt	1000 (454)
Acetic anhydride	5000 (2270)
Acetone	5000 (2270)
Acetone cyanohydrin	10 (4.54)
Acetonitrile	5000 (2270)
Acetophenone	5000 (2270)
2-Acetylaminofluorene	1 (0.454)
Acetyl bromide	5000 (2270)

In pounds/
kilograms



MARINE POLLUTANTS TABLE



§ 172.101

49 CFR Ch. I (10-1-99 Edition)

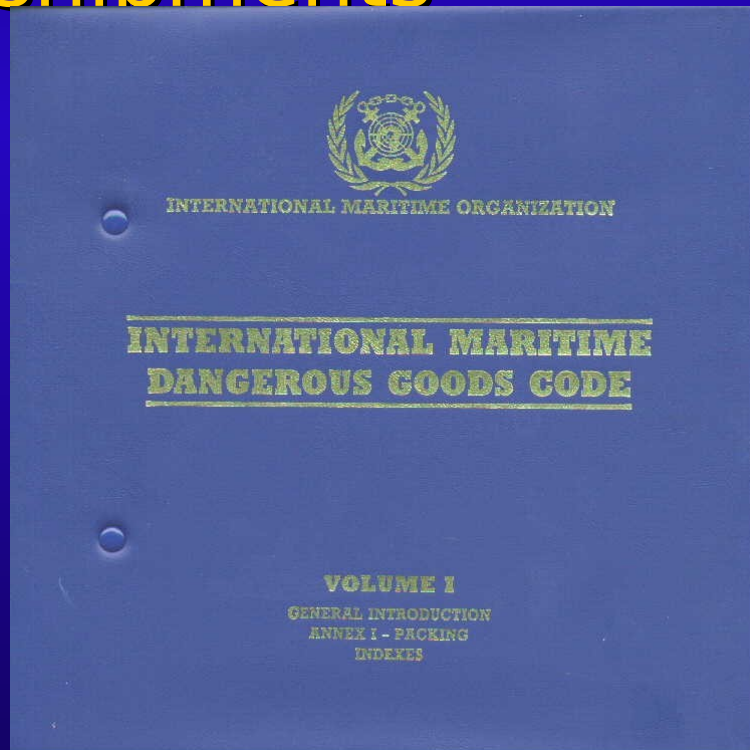
S.M.P.	Marine Pollutant
(1)	(2)
PP	Benzyl chloroformate
	Binapacryl
	<i>N,N</i> -Bis (2-hydroxyethyl) oleamide (LOA)
PP	Brodifacoum
	Bromine cyanide
	Bromoacetone
	Bromoallylene
	Bromobenzene
	ortho-Bromobenzyl cyanide
	Bromocyane
	Bromoform
PP	Bromophos-ethyl
	3-Bromopropene
	Bromoxynil
	Butanedione
	2-Butenal, stabilized
	Butyl benzenes
	Butyl benzyl phthalate
	n-Butyl butyrate
	<i>N</i> -tert-butyl- <i>N</i> -cyclopropyl-6-methylthio-1,3,5-triazine-2,4-diamine

S.M.P.	Marine Pollutant
(1)	(2)
PP	Chlorpyrifos
PP	Chlorthiophos
	Coal tar
	Coal tar naphtha
	Cocculus
	Coconitrile
	Copper acetoarsenite
	Copper arsenite
	Copper chloride
PP	Copper chloride solution
PP	Copper cyanide
PP	Copper metal powder
PP	Copper sulphate, anhydrous, hydrates
	Coumachlor
PP	Coumaphos
	Creosote (coal tar)
	Creosote (wood tar)
	Cresols (<i>o</i> -; <i>m</i> -; <i>p</i> -)
PP	Cresyl diphenyl phosphate
	Cresylic acid
	Cresylic acid sodium salt



International Maritime Dangerous Goods Code (IMDG)

- Regulates International HAZMAT water shipments





GENERAL INDEX

SUBSTANCE or ARTICLE	IMDG CODE PAGE	UN No.	CLASS	Pack- aging Group	Subsidiary Risk Label(s)	EmS No.	MFAG Table No.
ACETAL ^P	3101	1088	3.1	II	-	3-06	330
- ditto -	3171	1088	3.2	II	-	3-06	330
ACETALDEHYDE ^P	3101	1089	3.1	I	-	3-06	300
para-ACETALDEHYDE	see 3372	1264	3.3	III	-	3-06	300
ACETALDEHYDE AMMONIA	9021	1841	9	III	-	8-07	320
ACETALDEHYDE DIETHYL	see 3101	1088	3.1	II	-	3-06	330
ACETAL ^P							
- ditto -	see 3171	1088	3.2	II	-	3-06	330
beta-ACETALDEHYDE OXIME	3301	2332	3.3	III	-	3-06	320
ACETALDOL	see 6055	2839	6.1	II	-	6.1-02	300
beta-ACETALDOXIME	see 3301	2332	3.3	III	-	3-06	320
ACETIC ACID, GLACIAL	8100	2789	8	II	Flammable liquid	8-04	700
ACETIC ACID, SOLUTION, more than 80% acid, by mass	8100	2789	8	II	Flammable liquid	8-04	700
ACETIC ACID, SOLUTION, more than 10% but not more than 80% acid, by mass	8100	2790	8	II*	-	8-05	700
ACETIC ALDEHYDE ^P	see 3101	1089	3.1	I	-	3-06	300
ACETIC ANHYDRIDE	8101	1715	8	II	Flammable	8-04	700

CLASS 3.2 – Flammable liquids

Intermediate flashpoint group	UN No.	Formula	Explosive Limits	Flashpoint
BENZENE	1114	C ₆ H ₆	1.4% to 8%	-11 C c.c.

BENZOL

Properties

Colourless liquid with a characteristic odour.
Freezing point 5 C, flashes below its freezing point.
Immiscible with water.

Observations

Narcotic.
Exposure to this substance may produce serious chronic effects of a toxic nature.

Packaging group: II

Label of class

3

Packing

See table 3.4 in the introduction to this class.
For IBCs see section 26 of the General Introduction.
For tanks see section 13 of the General Introduction.

Stowage

Category B.
Clear of living quarters.

Packing, Stowage & Segregation

See also General Introduction and introduction to this class.

CLASS 3 – Flammable liquids

3.4

Packaging specifications

Note: For viscous liquids in packaging group III see 3.3.4.

Inner receptacle(s)	Outer packaging	Maximum gross mass or maximum liquid contents			
		Packaging group	Low flashpoint	Intermediate flashpoint	High flashpoint
Carboy, glass, maximum contents 60 litres	Wooden box (4C), (4D), (4F)	I, II	prohibited	prohibited	75 kg
		III	not applicable	not applicable	75 kg
	Fibre drum (1G)	I, II	prohibited	prohibited	75 kg
		III	not applicable	not applicable	75 kg
Carboy, glass, maximum contents 25 litres	Moulded expanded plastics box (4H1)	I, II	40 kg	40 kg	40 kg
		III	not applicable	not applicable	55 kg
Receptacles, glass, maximum contents 10 litres	Wooden box (4C), (4D), (4F)	I, II	prohibited	125 kg	125 kg
		III	not applicable	not applicable	225 kg
	Solid plastics box (4H2)	I, II	prohibited	125 kg	125 kg
		III	not applicable	not applicable	225 kg
Receptacles, glass, maximum contents 5 litres	Wooden box (4C), (4D), (4F)	I, II	125 kg	125 kg	125 kg
		III	not applicable	not applicable	225 kg
	Fibreboard box (4G)	I, II	40 kg	40 kg*	40 kg*
		III	not applicable	not applicable	55 kg
	Moulded expanded plastics box (4H1)	I, II	40 kg	40 kg	40 kg
		III	not applicable	not applicable	55 kg
	Solid plastics box (4H2)	I, II	75 kg	125 kg	125 kg
		III	not applicable	not applicable	225 kg
Cans, metal, maximum contents 30 litres	Wooden box (4C), (4D), (4F)	I, II	125 kg	125 kg	125 kg
		III	not applicable	not applicable	225 kg
	Fibreboard box (4G)	I, II	40 kg	40 kg*	40 kg*
		III	not applicable	not applicable	55 kg



International Air Transport Association (IATA) - Dangerous Goods

- Regulate Dangerous Goods (DGR) shipments via commercial air





IATA -- DGR (Cont)



Identification

4.2 List of Dangerous Goods

UN/ ID No. A	Proper Shipping Name/Description B	Class or Div. C	Sub Risk D	Hazard Label(s) E	PG F	Passenger and Cargo Aircraft				Cargo Aircraft Only		S.P. see 4.4 M
						Ltd Qty		Pkg Inst I	Max Qty per Pkg J	Pkg Inst K	Max Qty per Pkg L	
						Pkg Inst G	Max Qty per Pkg H					
1088	Accellerene, see p-Nitrosodimethylaniline (UN 1369) Accumulators, electric, see Batteries , etc. † (UN 2794, UN 2795, UN 2800) Accumulators, pressurized, hydraulic (containing non-flammable gas), see Articles, pressurized, hydraulic , etc. (UN 3164) Accumulators, pressurized, pneumatic (containing non-flammable gas), see Articles, pressurized, pneumatic , etc. (UN 3164) Acetal	3		Flamm. liquid	II	Y305	1 L	305	5 L	307	60 L	

4

A



IATA -- DGR (Cont)



Dangerous Goods Regulations

PACKING INSTRUCTION 305

STATE VARIATIONS: BEG-03, USG-04/08/13

△ OPERATOR VARIATIONS: AA-01, CA-03, CO-03/08, CS-03, DL-02/03, FX-02, IC-03, NW-01, RG-04, SQ-07, SW-01, TU-05, TW-03, UA-01/02, ZW-01/02

The General Packing Requirements of Subsection 5.0.2 must also be met.

Single packagings are not permitted.

COMBINATION PACKAGINGS

INNER PACKAGINGS

Desc.	Glass, Earthenware	Plastic	Metal (not aluminium)	Aluminium	Glass ampoule
Spec.	IP1	IP2	IP3	IP3A	IP8
Unit	L	L	L	L	L
Max. Qty	1.0	5.0	5.0	5.0	0.5

OUTER PACKAGINGS

Type	Drums					Jerricans			Boxes						
Desc.	Steel	Aluminium	Plywood	Fibre	Plastic	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic
Spec.	1A2	1B2	1D	1G	1H2	3A2	3B2	3H2	4A	4B	4C1 4C2	4D	4F	4G	4H2

5

305



TM 38-250 / AFJMAN 24-204



- Regulates dangerous goods shipments via military air

- This is a joint service publication





TM 38-250 (Cont)



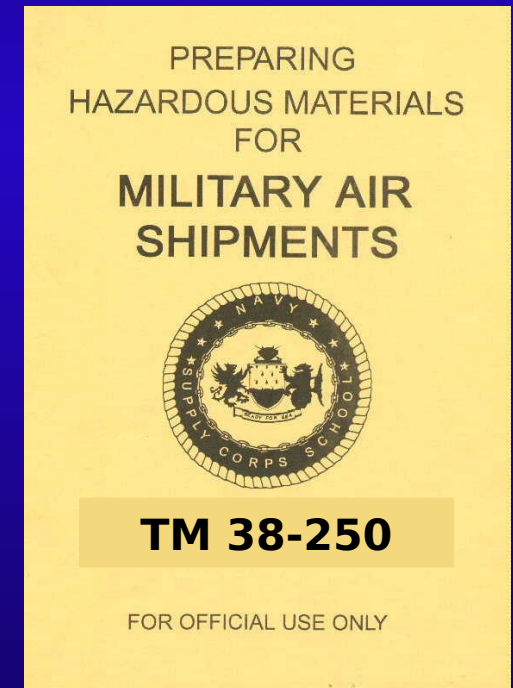
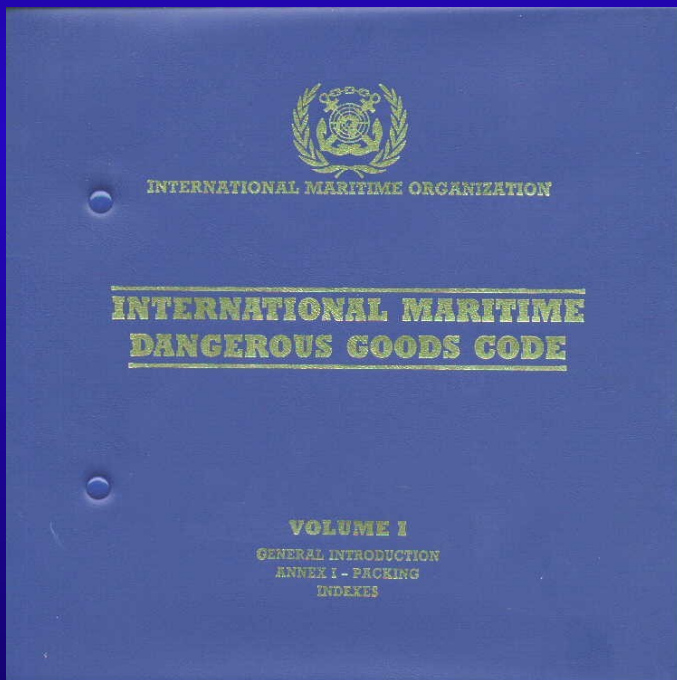
SYM- BOL (1)	PROPER SHIPPING NAME/DESCRIPTION (2)	HAZARD CLASS/DIV (3)	UN/ID NUMBER (4)	PG (5)	SUBSIDIARY RISK (6)	SPECIAL PROVISION (7)	PACKAGING PARAGRAPH (8)
	<i>Accellerene; see p-</i> NITROSODIMETHYLANILINE						
D	<i>Accumulators, electric; see BATTERIES, WET, etc.</i> ACCUMULATORS, PRESSURIZED, PNEUMATIC or HYDRAULIC (containing nonflammable gas) <i>see also, ARTICLES,</i> PRESSURIZED, etc.	2.2	NA1956			P5	A6.9
	ACETAL	3	UN1088	II		P5	A7.3
	ACETALDEHYDE	3	UN1089	I		P3, A3	A7.3
	ACETALDEHYDE AMMONIA	9	UN1841	III		P5	A13.13
	ACETALDEHYDE OXIME	3	UN2332	III		P5	A7.3
	ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, with more than 80% acid, by mass	8	UN2789	II		P5, A3, A6, A7, A10	A12.3
	ACETIC ACID SOLUTION, with more than 10%, but not more than 80% acid, by mass	8	UN2790	II		P5, A3, A6, A7, A10	A12.3
	ACETIC ANHYDRIDE	8	UN1715	II	3	P5, A3, A6, A7, A10	A12.3
	<i>Acetic oxide; see ACETIC ANHYDRIDE</i>						
	<i>Acetoin; see ACETYL METHYL CARBINOL</i>						
	ACETONE	3	UN1090	II		P5	A7.3
	ACETONE CYANOHYDRIN STABILIZED	6.1	UN1541	I		P2, 2, A3, N34	A10.7



Regulation Conflicts



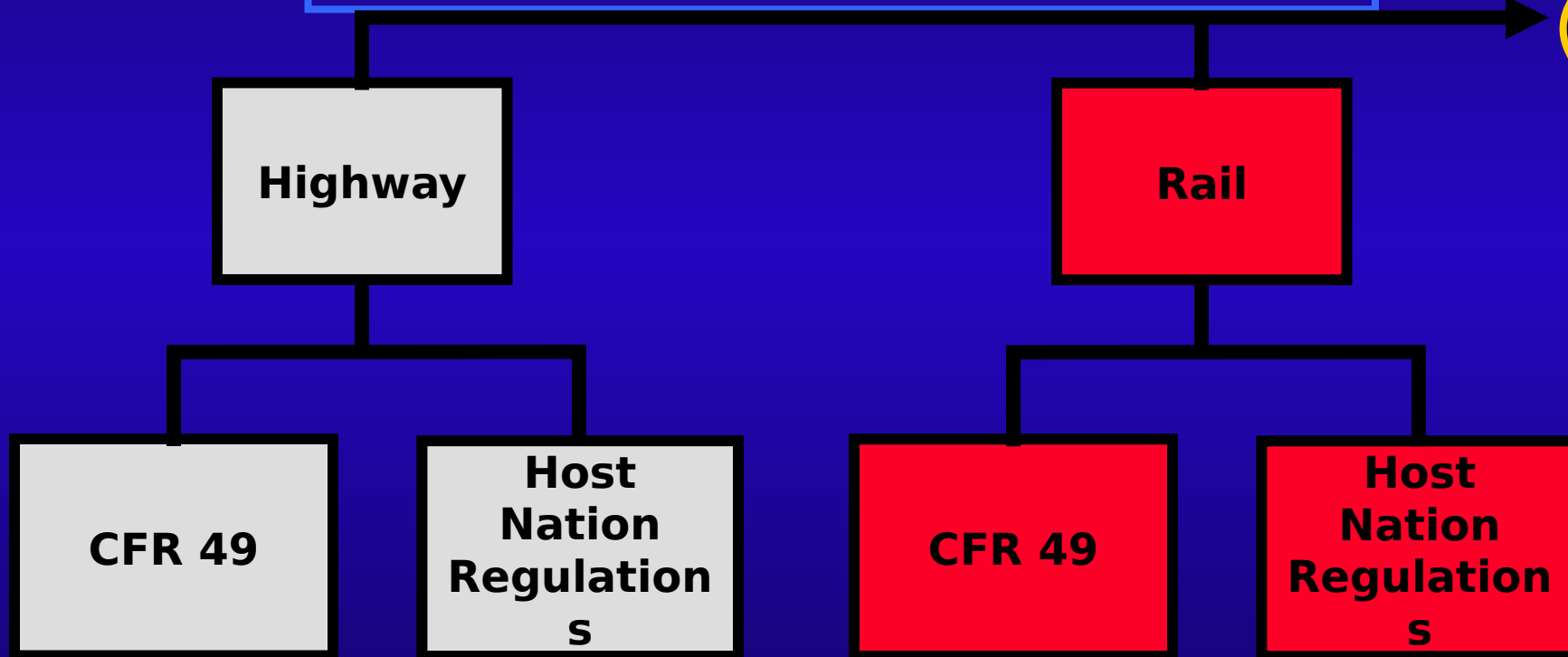
- Each of these covers a different Transportation Mode. Be sure to use all that apply.





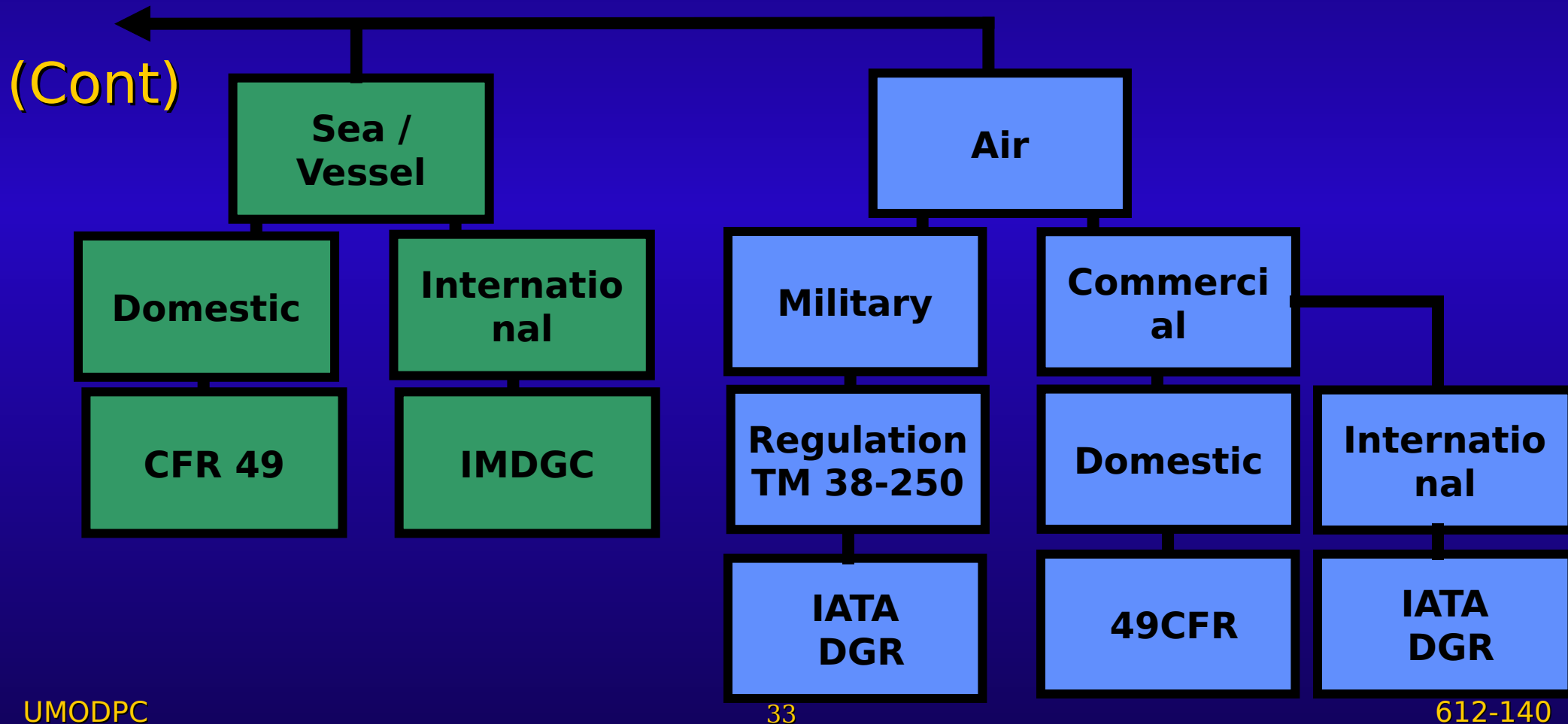
HAZMAT Regulations by Mode

(Cont)





HAZMAT Regulations by Mode (Cont)

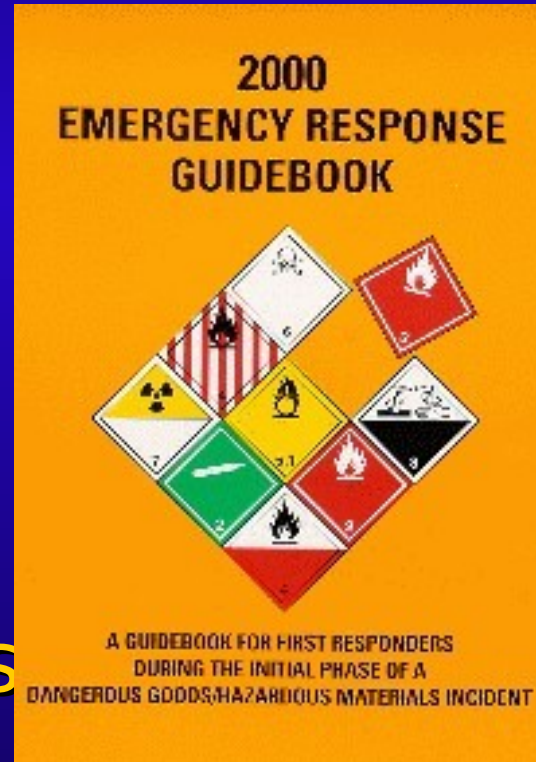




2000 Emergency Response Guidebook (ERG2000)



- A guidebook for first responders during the initial phase of a hazardous materials / dangerous goods incident





ERG2000 -- Yellow

- Yellow section: Index list of dangerous goods in numerical ID number order

ID No.	Guide No.	Name of Material
1090	127	Acetone



ERG2000 -- Blue



- Blue section: Index list of dangerous goods in alphabetical order of substance name

Name of Material	Guide No.	ID No.
Sulfuric acid	137	1830



ERG2000 -- Orange

- **Orange** section: Safety recommendations & emergency response information for dangerous substances identified by guide number including:

Potential Hazards: lists any fire, explosion & health effects of substances that must be handled immediately



ERG2000 -- Orange (Cont)



- Orange section (Cont):

Public Safety: tells response team the immediate isolation distances, protective clothing recommendations & suggested evacuation distances
Emergency Response: Provides guidance & activities for fire, spill or leak incidents & first aid procedures



ERG2000 -- Green

- **Green** section: Index list by numerical ID number of only those substances which are poisonous by inhalation

Includes initial isolation & protective action distances

- Remember: This publication should not be used to determine proper compliance



Unit HAZMAT Responsibilities



Unit Responsibilities



- Purpose is to provide guidance and send “Flags” to UMO’s that certain equipment & materials may be defined as hazardous material.
- Some items that are commonly shipped by deploying units: Oxygen & Acetylene cylinders; other compressed gases; various batteries & battery acids; mogas, diesel fuel & other POL products; antifreeze; fire extinguishers; mineral spirits, paint & paint thinner.



Unit Responsibilities (Cont)



- Appendix D, FM 4-01.011 gives direction on tasks that need to be accomplished to comply with HAZMAT regulations
 - ① Determine Proper Shipping Name, Hazard Class, United Nations Identification, and Packing Group from Hazardous Materials Table in CFR 49 (identify any subsidiary hazard class)
 - Determine the mode(s) of transportation
 - Make sure you select proper packaging
 - Ensure packaging is properly marked



Unit Responsibilities (Cont)



- Make sure the proper labeling is applied
- Prepare packing/load lists as required
- Determine the segregation requirements
- Determine the proper placarding of vehicles
- Load, block and brace HAZMAT IAW regulations
- Ensure water or air commodity and special handling codes are entered into AUDEL/OEL and DEL/UDL
- (Step 11) Prepare appropriate shipping documentation



Shipper's Dangerous Goods Checklist



SHIPPERS DANGEROUS GOODS CHECKLIST FOR NON-RADIOACTIVE BIOLOGICAL SHIPMENTS.

SHIPPERS DECLARATION FOR DANGEROUS GOODS (DGD).

IS THE FOLLOWING INFORMATION AS PRESENTED ON
A SHIPPERS DECLARATION OF DANGEROUS GOODS FORM
AND/OR WAYBILL CORRECT AND COMPLETE?

CHECK ALL APPROPRIATE BOXES.

	YES
Two copies in English and in the IATA format.	<input type="checkbox"/>
Full name and address of Shipper	<input type="checkbox"/>
Full name and address of Consignee.	<input type="checkbox"/>

Quantity and Type of Packing.

	YES	N/A
Number and type of Packages.	<input type="checkbox"/>	
Quantity and unit of measure per package.	<input type="checkbox"/>	<input type="checkbox"/>
Packing instruction number.	<input type="checkbox"/>	

Pages numbered and totaled. ☐

Name of City Airports of departure and destination (may be entered by courier). ☐

Delete the word Radioactive and either 'Passenger and Cargo' or 'Cargo Aircraft only' . ☐

Proper shipping Name. ☐

(Class 6.2 proper shipping name is INFECTIOUS SUBSTANCE AFFECTING HUMANS). (technical name, Physical state and Risk group may be required).

Class or division. ☐

UN or ID number preceded by prefix. ☐

Packing Group. ☐
Subsidiary Risk. E.G. ☐
Dry Ice ☐

Prior arrangement statement for Infectious Substances. ☐ ☐

Name and Title of signatory, Place and Date indicated. ☐

Signature of Shipper. ☐

Amendment or alteration signed by Shipper. ☐ ☐

On the Air Waybill.

The Handling Information box shows:

"Dangerous goods as per attached Shippers Declaration". ☐ ☐

Cargo Aircraft Only, if applicable. ☐ ☐

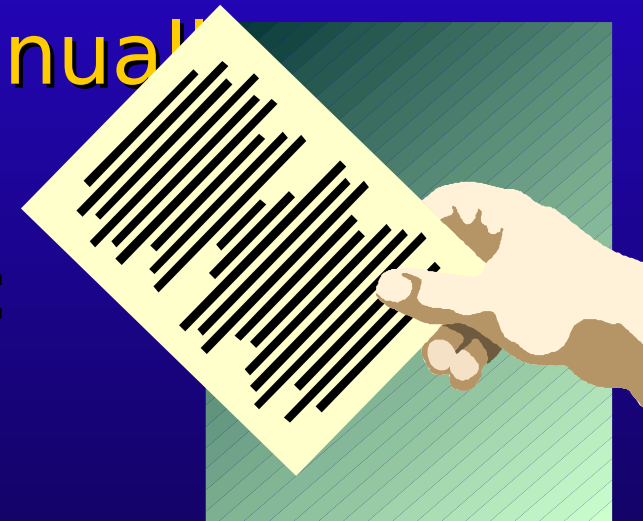
Packing conforms with packing instructions and is undamaged. ☐



Shipment Papers



- CFR 49 requires every shipment of HAZMAT be accompanied by shipping papers & a shipper's certification
 - Must be legible
 - Printed mechanically or manually
 - Printed in English
- The description must include:
 - Proper shipping name entered first or in contrasting color





Shipment Papers (Cont)

- The description must include (Cont):
 - Hazardous class or division
 - Identification Number
 - Packing Group in Roman numerals
 - Total quantity
 - Emergency response telephone number
- In that order



DD Form 836



- Provides emergency response instructions to drivers of all organic vehicles transporting explosives or hazardous materials on public roads

HAZMAT//HAZMAT//HAZMAT//HAZMAT//HAZMAT//HAZMAT							
1.a. NOMENCLATURE:		c. CONTAINER SEAL NO.:		e. TCN NUMBER:		f. BUMPER NO.	
b. MODEL NO.:		d. SERIAL NO.:					
DANGEROUS GOODS SHIPPING PAPER/DECLARATION AND EMERGENCY RESPONSE INFORMATION FOR HAZARDOUS MATERIALS TRANSPORTED BY GOVERNMENT VEHICLES/CONTAINERS OR VESSEL							
2. SHIPPER/ADDRESS/TELEPHONE NO.		3. LOCATION AND DATE SHIPMENT PREPARED		4. DATE OF TRAVEL		5. PAGE 1 OF _____ PAGES	
6. CARGO (To be completed by the unit or shipper Transportation Office (T.O.))							
PROPER SHIPPING NAME (Include RQ, Technical Names, Additional Information per 49 CFR 172.203, as required.) a.		HAZARD CLASS/DIVISION b.	UNID NUMBER c.	PACKING GROUP d.	PACKAGES NUMBER e.	KIND f.	NET TOTAL QUANTITY & GROSS WT. (kg) g.
							TOTAL AMMO (NEW) h.
(Port personnel complete items 7 and 8.)							
7. PORT OF EMBARKATION (OCONUS only)			8a. SHIP NAME (OCONUS only)			b. VOYAGE NUMBER	
9. CONSIGNEE							
10. REMARKS							
11a. COPY OF EMERGENCY GUIDE NUMBER(S) ATTACHED (See back of this form.)							
b. EMERGENCY NOTIFICATION. In all cases of accident, breakdown or fire, prompt notification must be given to shipper as noted in item 2.							
c. 24-HOUR EMERGENCY ASSISTANCE TELEPHONE NUMBERS:							
DOD NON-EXPLOSIVE HAZMAT: 1-800-851-8061 AT SEA: 804-279-3131 (COLLECT)		DOD HAZ CLASS 1 (EXPLOSIVES) ONLY: 703-697-0218/0219 (COLLECT) (WATCH OFFICER)		SAFE HAVEN: 1-800-524-0331 NATIONAL RESPONSE CENTER (NRC): 1-800-424-8802 AT SEA: 202-267-2675 (COLLECT)		DOD RADIOACTIVE MATERIALS: ARMY: (703) 697-0218 (COLLECT) USAF: (202) 767-4011 USNMC: (757) 887-4692/ 1-888/528-0148 DLA: (717) 770-5283	
12. CONTAINER PACKING CERTIFICATE OR VEHICLE PACKING DECLARATION It is hereby declared that the goods described above have been packed/loaded into the container/vehicle identified above in accordance with applicable provisions. (Must be completed and signed for all container/vehicle loads by person responsible for packing/loading.)							
a. TYPE OR PRINT NAME		b. SIGNATURE			c. DATE (YYYYMMDD)		
CONTAINER NO.		VEHICLE NO.					
13. SHIPPER'S CERTIFICATION This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, international and national governmental regulations.							
a. TYPE OR PRINT NAME OF SHIPPER CERTIFIER				c. SIGNATURE(S) OF VEHICLE OPERATOR(S)			
b. SIGNATURE OF SHIPPER CERTIFIER							
14. (X as appropriate) PREPARED IN ACCORDANCE WITH: 49 CFR _____ IMDGC _____							
DD FORM 836, MAY 2000 PREVIOUS EDITION IS OBSOLETE.							
This form meets the requirements of SOLAS 74 Chapter VII, Regulation 5; MARPOL 73/78 Annex III, Regulation 4 and IMDG Code, General Introduction, Section 9.							
HAZMAT//HAZMAT//HAZMAT//HAZMAT//HAZMAT//HAZMAT							

HAZMAT//HAZMAT//HAZMAT//HAZMAT//HAZMAT//HAZMAT

1.a. NOMENCLATURE: b. MODEL NO.:		c. CONTAINER SEAL NO.: d. SERIAL NO.:		e. TCN NUMBER: f. BUMPER NO.					
DANGEROUS GOODS SHIPPING PAPER/DECLARATION AND EMERGENCY RESPONSE INFORMATION FOR HAZARDOUS MATERIALS TRANSPORTED BY GOVERNMENT VEHICLES/CONTAINERS OR VESSEL									
2. SHIPPER/ADDRESS/TELEPHONE NO.		3. LOCATION AND DATE SHIPMENT PREPARED <i>Ft. Eustis, VA DD/MM/YY</i>		4. DATE OF TRAVEL <i>DD/MM/YY</i>					
				5. PAGE 1 OF 1 PAGES					
6. CARGO <i>(To be completed by the unit or shipper Transportation Office (T.O.))</i>									
PROPER SHIPPING NAME <i>(Include RQ, Technical Names, Additional Information per 49 CFR172.203, as required.)</i> a.	HAZARD CLASS/ DIVISION b.	UN/ID NUMBER c.	PACKING GROUP d.	PACKAGES <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">NUMBER e.</td> <td style="width:50%;">KIND f.</td> </tr> </table>		NUMBER e.	KIND f.	NET TOTAL QUANTITY & GROSS WT. (kg) g.	TOTAL AMMO (NEW) h.
NUMBER e.	KIND f.								
<i>Cartridges for Weapons</i>	<i>1.2E</i>	<i>UN0321</i>	<i>II</i>	<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;"><i>4</i></td> <td style="width:50%; text-align: center;"><i>BX</i></td> </tr> </table>		<i>4</i>	<i>BX</i>	<i>4 Rds</i>	<i>14.631kg</i>
<i>4</i>	<i>BX</i>								
<i>RQ, Hexachlorocyclopentadiene, Toxic Inhalation Hazard Zone B</i>	<i>6.1</i>	<i>UN2646</i>	<i>I</i>	<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;"><i>3</i></td> <td style="width:50%; text-align: center;"><i>DR</i></td> </tr> </table>		<i>3</i>	<i>DR</i>	<i>15kg</i>	
<i>3</i>	<i>DR</i>								
<i>(Port personnel complete Items 7 and 8.)</i>									
7. PORT OF EMBARKATION <i>(OCONUS only)</i>			8a. SHIP NAME <i>(OCONUS only)</i>			b. VOYAGE NUMBER			
9. CONSIGNEE			<div style="border: 2px solid blue; padding: 20px; display: inline-block;"> <div style="font-size: 2em; margin: 0;">DD Form</div> <div style="font-size: 3em; margin: 0;">836</div> </div>						
10. REMARKS									
11a. COPY OF EMERGENCY GUIDE NUMBER(S) _____ ATTACHED <i>(See back of this form.)</i>									
b. EMERGENCY NOTIFICATION. In all cases of accident, breakdown or fire, prompt notification must be given to shipper as noted in Item 2.									
c. 24 HOUR EMERGENCY ASSISTANCE TELEPHONE NUMBERS:									

EMERGENCY RESPONSE INFORMATION

Guide Numbers 112 and 114 from the U.S. Department of Transportation North American Emergency Response Guide Book (RSPA P-5200.7) are reproduced hereon. These guides are applicable to hazard Class 1 materials (Explosives).

Mark an X in the appropriate box:



USE GUIDE 112 FOR EXPLOSIVES:
(1.1), (1.2), (1.3), (1.5) OR (1.6) Class A or B



USE GUIDE 114 FOR EXPLOSIVES:
(1.4) Class C

For all other hazardous materials or substances, annotate appropriate emergency Response Guide Book Guide Number in the block 11.a., and attach a copy of the guide number page or pages.

DD Form
836

GUIDE 112

POTENTIAL HAZARDS

FIRE OR EXPLOSION:

MAY EXPLODE AND THROW FRAGMENTS 1600 METERS (1 MILE) OR MORE IF FIRE REACHES CARGO

HEALTH HAZARDS:

Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY:

CALL CHEMTREC AT 1-800-424-9300.

- Isolate spill or leak area immediately for at least 500 meters (1/3 mile) in all directions. Move people out of line of sight of the scene and away from windows.
- Keep unauthorized personnel away and stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING:

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

EVACUATION:

LARGE SPILL

Consider initial evacuation for 800 meters (1/2 mile) in all directions.

FIRE

- If rail car or trailer is involved in a fire and heavily encased explosives such as bombs or artillery projectiles are suspected, ISOLATE for 1600 meters (1 mile) in all directions; also initiate evacuation including emergency responders for 1600 meters.

GUIDE 114

POTENTIAL HAZARDS

FIRE OR EXPLOSION:

MAY EXPLODE AND THROW FRAGMENTS 500 METERS (1/3 MILE) OR MORE IF FIRE REACHES CARGO

HEALTH HAZARDS:

Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY:

CALL Emergency Response Telephone Number on Shipping paper first. If Shipping Paper not available or no answer, CALL CHEMTREC AT 1-800-424-9300.

- Isolate leak or spill area immediately for at least 100 meters (300 feet) in all directions. Move people out of line of sight of the scene and away from windows.
- Keep unauthorized personnel away and stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING:

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

EVACUATION:

LARGE SPILL

Consider initial evacuation for 250 meters (800 feet) in all directions.

FIRE

- If rail car or trailer is involved in a fire, ISOLATE for 500 meters (1/3 mile) in all directions; also, initiate evacuation including emergency responders for 500 meters (1/3 mile) in all directions.

CARGO FIRES: DO NOT FIGHT FIRE WHEN IT REACHES CARGO!

CARGO MAY EXPLODE!

- Stop all traffic and clear the area for at least 500 meters (1/3 mile) in all directions.



DD Form 836 (Cont)

- Appropriate Emergency Response Guidebook page(s) must be attached to DD Form 836

HAZMAT/HAZMAT/HAZMAT/HAZMAT/HAZMAT

ERG2000

ough skin,

and/or toxic and cause pollution.

y decompose upon heating to

ETY

on Shipping Paper first. If Shipping
ropriate telephone number listed on the

st 25 to 50 meters (80 to 160 feet) in all

breathing apparatus (SCBA).
ch is specifically recommended by the manufacturer.
fection.
othing provides limited protection in fire situations ONLY;

on and Protective Action Distances for highlighted substances.
es, increase, in the downwind direction, as necessary, the
er "PUBLIC SAFETY".

k is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all
initial evacuation for 800 meters (1/2 mile) in all directions.

HAZMAT



DD Form 836 (Cont)

- DD Form 836 must be completed & signed for each vehicle by the person *qualified within the last 24 months* for HAZMAT certification.
- DD Form 836 is a shipping paper for listing hazardous material, not a shipping or packing list.
 - Any additional information should be included on the *accompanying* packing list (DD 1750 or FORSCOM 5748-R)



DD Form 626



- Used for inspecting both commercial & government vehicles that move 'placardable' quantities of hazardous material on public roads (FR 55-1)

MOTOR VEHICLE INSPECTION (TRANSPORTING HAZARDOUS MATERIALS) <small>(Read Instructions before completing this form.)</small>											
This form applies to all vehicles which must be marked or placarded in accordance with Title 49 CFR.						1. GOVERNMENT BILL OF LADING/TRANSPORTATION CONTROL NUMBER					
SECTION 1 - DOCUMENTATION						ORIGIN a.			DESTINATION b.		
2. CARRIER/GOVERNMENT ORGANIZATION											
3. DATE/TIME OF INSPECTION											
4. LOCATION OF INSPECTION											
5. OPERATOR(S) NAME(S)											
6. OPERATOR(S) LICENSE NUMBER(S)											
7. MEDICAL EXAMINER'S CERTIFICATE*											
8. (X if satisfactory at origin)						9. CVSA DECAL DISPLAYED ON COMMERCIAL EQUIPMENT*					
a. MILITARY HAZMAT ENDORSEMENT						d. ENG OR EQUIVALENT COMMERCIAL:			YES NO		
b. VALID LEASE*						e. DRIVER'S VEHICLE INSPECTION REPORT*			YES NO		
c. ROUTE PLAN						f. COPY OF 49 CFR PART 397			a. TRUCK/TRACTOR		
									b. TRAILER		
SECTION II - MECHANICAL INSPECTION <small>All items shall be checked on empty equipment prior to loading. Items with an asterisk shall be checked on all incoming loaded equipment.</small>											
10. TYPE OF VEHICLE(S)						11. VEHICLE NUMBER(S)					
12. PART INSPECTED (X as applicable)						ORIGIN (1)		DESTINATION (2)		COMMENTS (3)	
						SAT UNSAT		SAT UNSAT			
a. SPARE ELECTRICAL FUSES											
b. HORN OPERATIVE											
c. STEERING SYSTEM											
d. WINDSHIELD/WIPERS											
e. MIRRORS											
f. WARNING EQUIPMENT											
g. FIRE EXTINGUISHER*											
h. ELECTRICAL WIRING											
i. LIGHTS AND REFLECTORS											
j. FUEL SYSTEM*											
k. EXHAUST SYSTEM											
l. BRAKE SYSTEM*											
m. SUSPENSION											
n. COUPLING DEVICES											
o. CARGO SPACE											
p. LANDING GEAR*											
q. TIRES, WHEELS, RIMS											
r. TAILGATE/DOORS*											
s. TARP/PAULIN*											
t. OTHER (Specify)											
13. INSPECTION RESULTS (X one) ACCEPTED						REJECTED					
<small>(If rejected give reason under "Remarks". Equipment will be approved if deficiencies are corrected prior to loading.)</small>											
14. SATELLITE MOTOR SURVEILLANCE SYSTEM: (X one) ACCEPTED						REJECTED					
15. REMARKS											
16. INSPECTOR SIGNATURE (Origin)						17. INSPECTOR SIGNATURE (Destination)					
SECTION III - POST LOADING INSPECTION <small>This section applies to Commercial and Government/Military vehicles. All items will be checked prior to release of loaded equipment and shall be checked on all incoming loaded equipment.</small>											
						ORIGIN (1)		DESTINATION (2)		COMMENTS (3)	
						SAT UNSAT		SAT UNSAT			
18. LOADED IAW APPLICABLE SEGREGATION/COMPATIBILITY TABLE OF 49 CFR											
19. LOAD PROPERLY SECURED TO PREVENT MOVEMENT											
20. SEALS APPLIED TO CLOSED VEHICLE; TARP/PAULIN APPLIED ON OPEN EQUIPMENT											
21. PROPER PLACARDS APPLIED											
22. SHIPPING PAPERS/DD FORM 836 FOR GOVERNMENT VEHICLE SHIPMENTS											
23. COPY OF DD FORM 626 FOR DRIVER											
24. SHIPPED UNDER DOT EXEMPTION 868											
25. INSPECTOR SIGNATURE (Origin)						26. DRIVER(S) SIGNATURE (Origin)					
27. INSPECTOR SIGNATURE (Destination)						28. DRIVER(S) SIGNATURE (Destination)					

DD FORM 626, SEP 1998 (EG)

PREVIOUS EDITION IS OBSOLETE

Page 1 of 3 Pages
Designed using Reform Pro, WWS/DIGR, Sep 98



DD Form 626 (Cont)



- DD Form 626 is used to verify required documentation for government vehicles including:

Checking to ensure the driver's military license has been annotated with the HAZMAT training attended

DD Form 626

MOTOR VEHICLE INSPECTION (TRANSPORTING HAZARDOUS MATERIALS)

(Read Instructions before completing this form.)

This form applies to all vehicles which must be marked or placarded in accordance with Title 49 CFR.

1. GOVERNMENT BILL OF LADING/TRANSPORTATION CONTROL NUMBER

1

SECTION 1 - DOCUMENTATION

ORIGIN
a.

DESTINATION
b.

2. CARRIER/GOVERNMENT ORGANIZATION

3. DATE/TIME OF INSPECTION

4. LOCATION OF INSPECTION

5. OPERATOR(S) NAME(S)

6. OPERATOR(S) LICENSE NUMBER(S)

7. MEDICAL EXAMINER'S CERTIFICATE*

8. (X if satisfactory at origin)

a. MILITARY HAZMAT ENDORSEMENT

d. ERG OR EQUIVALENT COMMERCIAL:

YES

NO

b. VALID LEASE*

e. DRIVER'S VEHICLE INSPECTION REPORT*

c. ROUTE PLAN

f. COPY OF 49 CFR PART 397

9. CVSA DECAL DISPLAYED ON
COMMERCIAL
EQUIPMENT*

YES

NO

a. TRUCK/TRACTOR

b. TRAILER

SECTION II - MECHANICAL INSPECTION

All items shall be checked on empty equipment prior to loading. Items with an asterisk shall be checked on all incoming loaded equipment.

10. TYPE OF VEHICLE(S)

11. VEHICLE NUMBER(S)

12. PART INSPECTED
(X as applicable)

ORIGIN
(1)

DESTINATION
(2)

ORIGIN
(1)

DESTINATION
(2)

COMMENTS
(3)

SAT UNSAT

SAT UNSAT

SAT UNSAT

SAT UNSAT

a. SPARE ELECTRICAL FUSES

b. HORN OPERATIVE

c. STEERING SYSTEM

d. WINDSHIELD/WIPERS

e. MIRRORS

k. EXHAUST SYSTEM

l. BRAKE SYSTEM*

m. SUSPENSION

n. COUPLING DEVICES

o. CARGO SPACE



GBL

U.S. GOVERNMENT BILL OF LADING

MEMORANDUM
COPYB/L
NO > M2536514

1. TRANSPORTATION COMPANY TENDERED TO OLD DOMINION FREIGHT LINE IN	2. SCAC ODEL	3. DATE B/L PREPARED 990520	4. ROUTE ORDER/RELEASE NUMBER 7YBCANR3PF
5. DESTINATION (Name, address, and ZIP code) MARINE AIR STATION TRAFFIC MANAGEMENT BLDG 149 CHERRY POINT, NC 28533-5040	6. SPLC (Dest.) 405523000	8. ORIGIN (Name, address, and ZIP code) 375 AW/LGTTF TRAFFIC MGT FLT 102 SOUTH ADAMS STREET BLDG 4001 SCOTT AFB, IL 62225-5406	
	7. SPLC (Orig.) 396618240		
9. CONSIGNEE (Name, address and ZIP code of installation) MARINE AIR STATION TRAFFIC MANAGEMENT BLDG 149 CHERRY POINT, NC 28533-5040	10. GBLOC (Cons.) 100I	11. SHIPPER (Name, address and ZIP code) 375 AW/LGTTF TRAFFIC MGT FLT 102 SOUTH ADAMS STREET BLDG 4001 SCOTT AFB, IL 62225-5406	
12. APPROPRIATION CHARGEABLE ADVICE NO. O/A:		13. BILL CHARGES TO (Dept/agency,bureau/office mailing address and ZIP code) COMMANDING GENERAL MARINE CORP MARINE CORPS LG BASE, CODE 470 ALBANY, GA 31704-5001	
14. VIA (Route shipment when advantageous to the Government)		AGENCY LOC CODE G31704	


15. MARKS AND ANNOTATIONS RDD - 1999-06-01

MARINE AIR STATION
TRAFFIC MGMT
CHERRY POINT

EMERGENCY PHONE # 1-800-851-8061

16. PACKAGES	17	18	description if possible; otherwise use a clear nontechnical description	(Pounds only)	Services	Rate	Charges
NO	KIND	HM					
1	PCS		CLASSIFICATION ITEM NO. FAK, RVNE \$2.50 PER LB D-999913(0) RELEASE VALUE: \$2.50 TOTAL CUBE This GBL consists of 2 page(s) and has no stop offs.	0 TOTAL WEIGHT:			
1	SD	X	EMERGENCY PHONE # 1-800-851-8061 M001469130006XXX N-156240(0) CUBE: 21 LIQUID, NOI, OTHER THAN AS DESCRIBED IN ITEMS 46030 AND 46032, IN BARRELS, BOXES, CRATES OR PACKAGES 2440, 2445 OR 2516 PAINT.3/ FLAMMABLE LIQUID, UN1263, PGII, ACETONE.3/ FLAMMABLE LIQUID, UN1090, PGII, PROPANE.2.1/ FLAMMABLE GAS, UN1978.				
				194	TOTAL		

OLD DOMINION FREIGHT LINE



04300136603 STL



Shipper's Certification



- Each person (shipper) who offers a hazardous material for shipment shall certify that the material offered is in accordance with the provisions of the applicable 49 CFR subchapter
- The person who certifies the information about the hazardous material must be certified according to 49 CFR, para 172.204
(a) (2)



Shippers Certification (Cont)



- “This is to certify that the (‘above-named’ or ‘herein-named’) materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulation of the Department of Transportation”
- There are several ways to word the certification. consult Para 172.204 for variations, i.e., air.



Shipper's Declaration for Dangerous Goods

TM 38-250 (MILAIR)
IATA (COMMAIR)

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

Shipper ABC Company 1000 High Street Yongville, Ontario Canada		Air Waybill No. 800 1234 5686				
Consignee CBA Ltd 50 Rue de la Paix Paris 75 006 France		Page 1 of 1 Pages Shipper's Reference Number (optional)				
Two completed and signed copies of this Declaration must be handed to the operator.		For optional use for Company logo name and address				
TRANSPORT DETAILS This shipment is within the limitations prescribed for: (Delete non-applicable) <table border="1"><tr><td>PASSENGER AND CARGO AIRCRAFT</td><td>CARGO AIRCRAFT ONLY</td></tr></table>		PASSENGER AND CARGO AIRCRAFT	CARGO AIRCRAFT ONLY	WARNING Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a forwarder or an IATA cargo agent.		
PASSENGER AND CARGO AIRCRAFT	CARGO AIRCRAFT ONLY					
Airport of Departure: Yongville		Shipment type: (Delete non-applicable) <table border="1"><tr><td>NON-RADIOACTIVE</td><td>RADIOACTIVE</td></tr></table>		NON-RADIOACTIVE	RADIOACTIVE	
NON-RADIOACTIVE	RADIOACTIVE					
Airport of Destination: Paris, Charles de Gaulle						
NATURE AND QUANTITY OF DANGEROUS GOODS						
Dangerous Goods Identification						
Proper Shipping Name	Class or Division	UN or ID No.	Pack ing Group; Sub- sidiary Risk	Quantity and type of packing	Packing Inst.	Authorization
Mistline	6.1	UN1654	II	1 Steel drum 20 L	611	
Self-reactive solid type D (Benzene Sulphohydrate)	4.1	UN3226	II	1 Fibreboard box 10 kg	430	
Paint	3	UN1263	II	2 Fibreboard boxes 4 L	305	
Paint	3	UN1263	III	1 Fibreboard box 30 L	309	
Vehicle (flammable liquid powered)	9	UN3166		One automobile 1350 kg	900	
Chemical kits	9	UN3316	II	1 Fibreboard box 3 kg	915	
Additional Handling Information The packages containing UN3226 must be shaded from direct sunlight, stored away from all sources of heat in a well ventilated area and not over-stowed with other cargo.						
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.				Name/Title of Signatory B. Smith, Dispatch Supervisor Place and Date Yongville 1 January 1999 Signature (see warning above) B. Smith		

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

Shipper

ABC Company
1000 High Street
Youngville, Ontario
Canada

Air Waybill No.

800 1234 5686

Page 1 of 1 Pages

Shipper's Reference Number
(optional)

Consignee

CBA Ltd
50 Rue de la Paix
Paris 75 006
France

For optional use
for
Company logo
name and address

Two completed and signed copies of this Declaration must
be handed to the operator.

WARNING

Failure to comply in all respects with the applicable
Dangerous Goods Regulations may be in breach of
the applicable law, subject to legal penalties. This
Declaration must not, in any circumstances, be
completed and/or signed by a consolidator, a
forwarder or an IATA cargo agent.

TRANSPORT DETAILS

This shipment is within the
limitations prescribed for
(delete non-applicable)

Airport of Departure

Youngville

~~PASSENGER
AND CARGO
AIRCRAFT~~

CARGO
AIRCRAFT
ONLY

Airport of Destination

Paris, Charles de Gaulle

Shipment type: (delete non-applicable)

~~NON-RADIOACTIVE~~ ~~RADIOACTIVE~~

NATURE AND QUANTITY OF DANGEROUS GOODS

Dangerous Goods Identification					Quantity and type of packing	Packing Inst.	Authorization
Proper Shipping Name	Class or Division	UN or ID No.	Pack- ing Group	Subs- idiary Risk			
Nicotine	6.1	UN1654	II		1 Steel drum 20 L	611	
Self-reactive solid type U (Benzene Selenohydrazide)	4.1	UN3226	II		1 Fibreboard box x 10 kg	430	

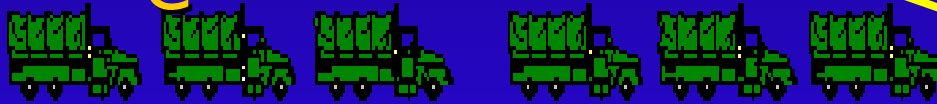


SHIPPING PAPER SELECTION



Convoy to APOE

- Deploy by:
Surface



DD
Form
626

DD
Form
836

Regulations
CFR 49

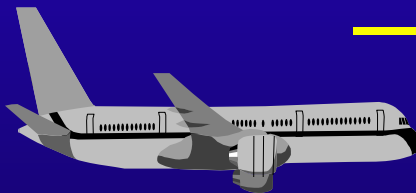
DOD 4500.9-R, Part II



Shippers
Declaration
for
Dangerous
Goods

Regulations
TM 38-250
IATA

Air

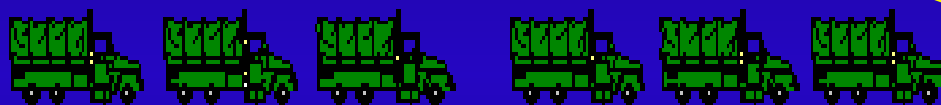


Note: Three separate HAZMAT forms are required



Convoy to SPOE

- Deploy by:
Surface



DD
Form
626

DD
Form
836

Regulations
CFR 49

DOD 4500.9-R, Part II



Shippers
Declaration
for
Dangerous
Goods

Regulation
IMDGC

Sea



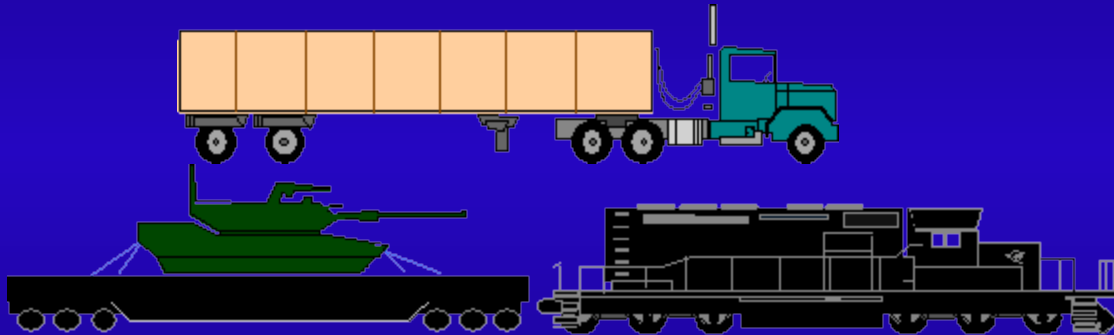
Note: Three separate HAZMAT forms are required



Commercial Truck / Rail to APOE



- Deploy by:
Com'l Surface →



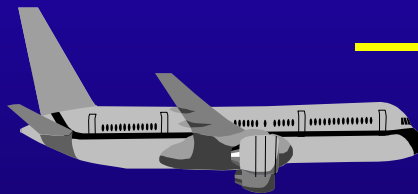
GBL

DD
Form
626



Regulation
CFR 49
FR 55-1
DOD 4500.9-R,
Part II

Air →



Shippers
Declaration
for
Dangerous
Goods

Regulations
TM 38-250
IATA

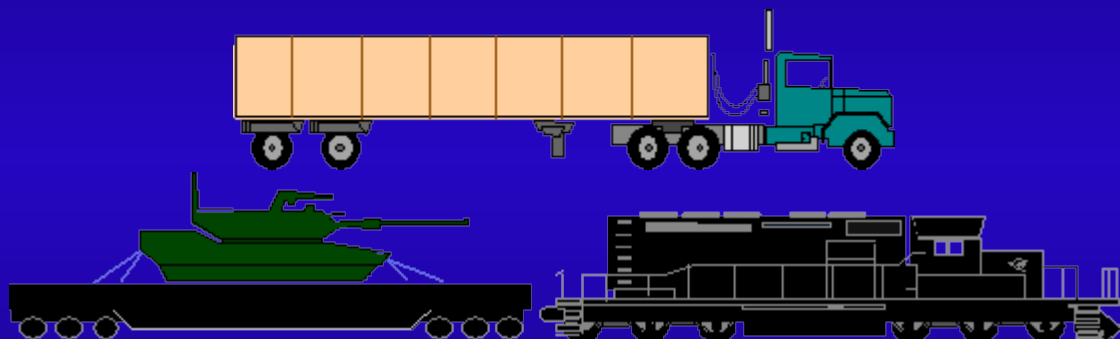
*Note: Three separate HAZMAT forms are
required*



Commercial Truck / Rail to SPOE

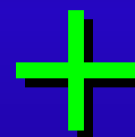


- Deploy by:
Com'l Surface →



GBL

DD
Form
626



Regulation
CFR 49
FR 55-1
DOD 4500.9-R,
Part II

Sea



Shippers
Declaration
for
Dangerous
Goods

Regulation
IMDGC

*Note: Three separate HAZMAT forms are
required*



Emergency Response Information



- Emergency response information provided on shipping documents must be printed in English and include:
 - A 24-hour emergency response telephone number (with area code & international access codes) monitored at all times by a person who is knowledgeable in the material and emergency response procedures



Training Requirements

- Mandatory for all involved with preparation, shipment or certification of HAZMAT for transportation
- Training documented in personnel records until 90 days following separation from DOD
- HAZMAT training is good for 2 years, then refresher courses are required
- Certifier and packaging personnel are appointed in writing by unit commander



Certification Training Requirements



- Certification training must be accomplished at one of four DOD schools located at:
 - U.S. Army Defense Ammunition Center, McAlester, OK
 - School of Military Packaging Technology, Aberdeen Proving Grounds, MD
 - Navy Supply Corps School, Athens, GA
 - 345 TRS / TTTD, Lackland AFB, TX



Hazardous Materials Information



Classifying HAZMAT



- Three steps to proper HAZMAT Classification:
 - ① Correctly identify & classify material into one of the nine Hazard Classes
 - Determine any subsidiary risks
 - Assign the item to one of the 3 Packing Groups, if applicable
- Note: A single material may fall into several hazard classes



Identifying HAZMAT



- HAZMAT must be identified by its Proper Shipping Name as listed in the appropriate modal regulation

Trade Names (for example, “Drop Dead Fly Trap”) are NOT considered proper shipping names
Pesticides, solid, toxic, n.o.s. would be the Proper Shipping Name for the above product



Identifying HAZMAT (Cont)



- HAZMAT must also be identified by the Chemical Name of the primary hazardous ingredient & proper ID number

Example: Dithiocarbamate pesticide,
solid, poisonous UN2771

- Packing Group (if applicable) must also be identified



Identifying HAZMAT (Cont)



- Packing Groups (PG): indicate degree of danger presented by the material

PG I: Great Danger

PG II: Medium Danger

PG III: Minor Danger



Identifying HAZMAT (Cont)



- Packing Group classification example:

Hydrogen Peroxide:

Pure -100%: = PG I

7-10% Diluted: = PG II

50 -70% Diluted: = PG III





Identifying HAZMAT (Cont)

- ID numbers are not required for:
Limited
Quantity

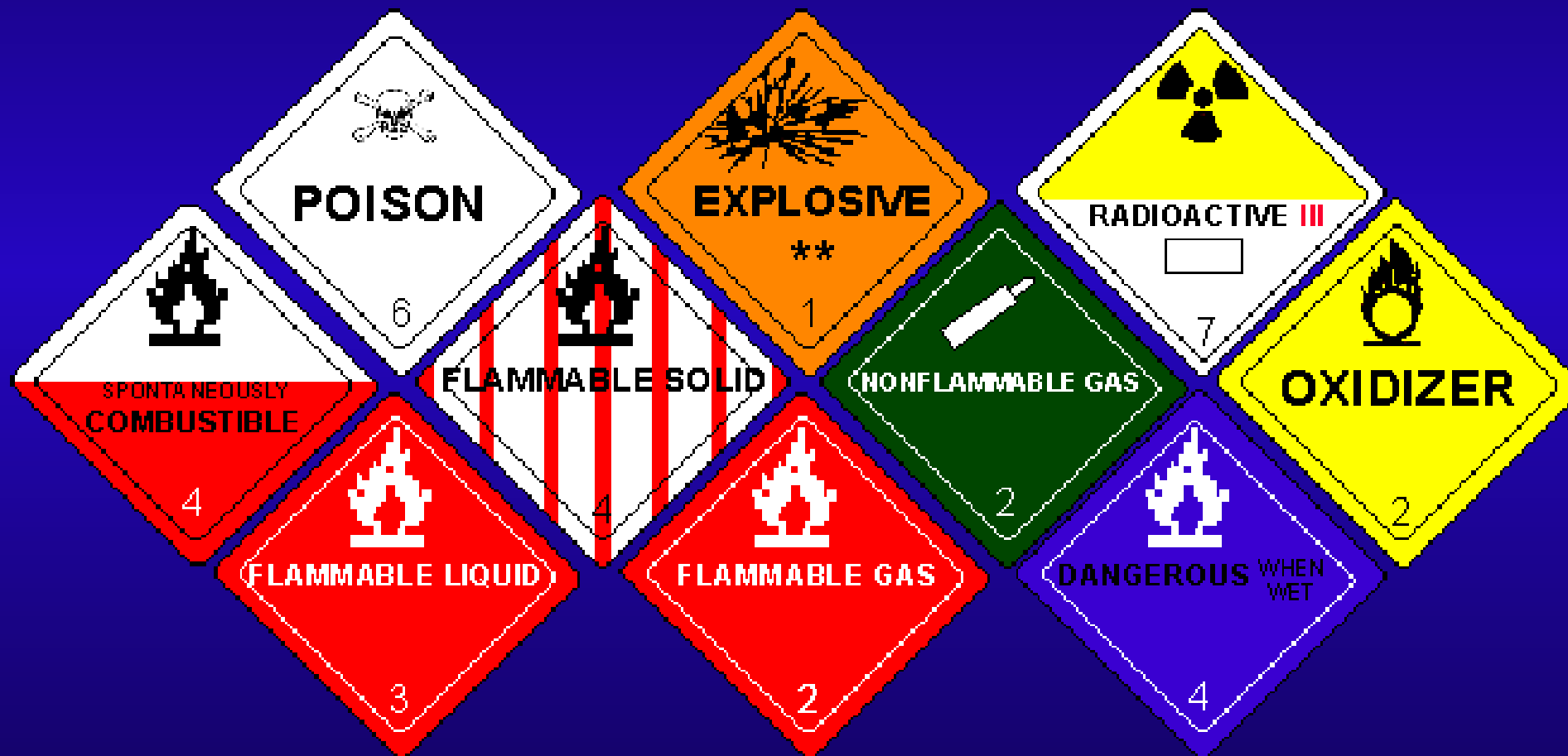


Consumer Commodity
ORM-D





Hazardous Material Class Labels





9 Hazard Classes

- Class 1 - Explosives

Divisions 1.1 - 1.6

- + Examples: Cartridges for weapons, signal flares, safety fuses, dynamite, fireworks



- Class 2 - Gases
Division 2.1 Flammable Gas

- + Examples: Butane, hydrogen, aerosols





9 Hazard Classes (Cont)

- Class 2- Gases (Cont)

Division 2.2 Non-flammable Gas
+ Examples: Liquefied nitrogen,
helium

Division 2.3 Toxic Gas
+ Examples: Aerosols of low
toxicity & some tear gas

- Class 3- Flammable

Liquids Ocean Divisions 3.1, 3.2 &
3.3

Examples: Paint, gasoline, fuel,
oil





9 Hazard Classes (Cont)

- Class 4 - Flammable Solid
 - Division 4.1 Flammable Solid
 - + Examples: Matches, sulphur, Nitronaphthalene
 - Division 4.2 - Spontaneously Combustible
 - + Examples: White or yellow phosphorus, magnesium
 - Division 4.3 Dangerous When Wet
 - + Examples: Calcium carbide, sodium, lithium





9 Hazard Classes

(Cont)

- Class 5 - Oxidizing
Substances & Organic Peroxides
Division 5.1 Oxidizer
+ Examples: Ammonium nitrate fertilizer, pool chlorine
Division 5.2 Organic Peroxides
+ Examples: MEK peroxide, dibenzoyl peroxide





9 Hazard Classes (Cont)

- Class 6 - Poisonous (toxic)

Substances & Infectious

Substances

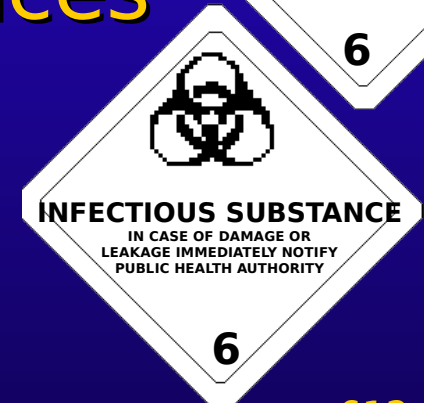
Division 6.1 Poisonous (toxic)

substances

+ Examples: Nicotine, cyanide, arsenic

Division 6.2 Infectious Substances

+ Examples: Diagnostic specimens, biological products





9 Hazard Classes (Cont)

- Class 7 - Radioactive Materials
 - Examples: Medicines, instruments
- Class 8 - Corrosives
 - Examples: Battery acid, mercury





9 Hazard Classes (Cont)

- Class 9 - Miscellaneous Dangerous Goods
 - Examples: Dry ice, cosmetics, life rafts, asbestos, magnetized materials, consumer commodities, other regulated substances, internal combustion engines, motor vehicles





HAZMAT Packaging &

Marking/Labeling

- Use UN or other authorized packaging
- Packaging materials must be compatible with the hazardous material being packaged
- Multiple substances in one package must be compatible with each other
- In addition to shipper/consignee information, HAZMAT shipments require additional marking/labeling



HAZMAT Labeling



- 172.400

Each person who offers;
“shall label the package or containment
device with the labels
specified for the material in the 172.101
Table”



HAZMAT Marking/Labeling (Cont)

- Markings must be:

Durable

In English

Un-obscured

Sharp contrasting
background

Away from other markings

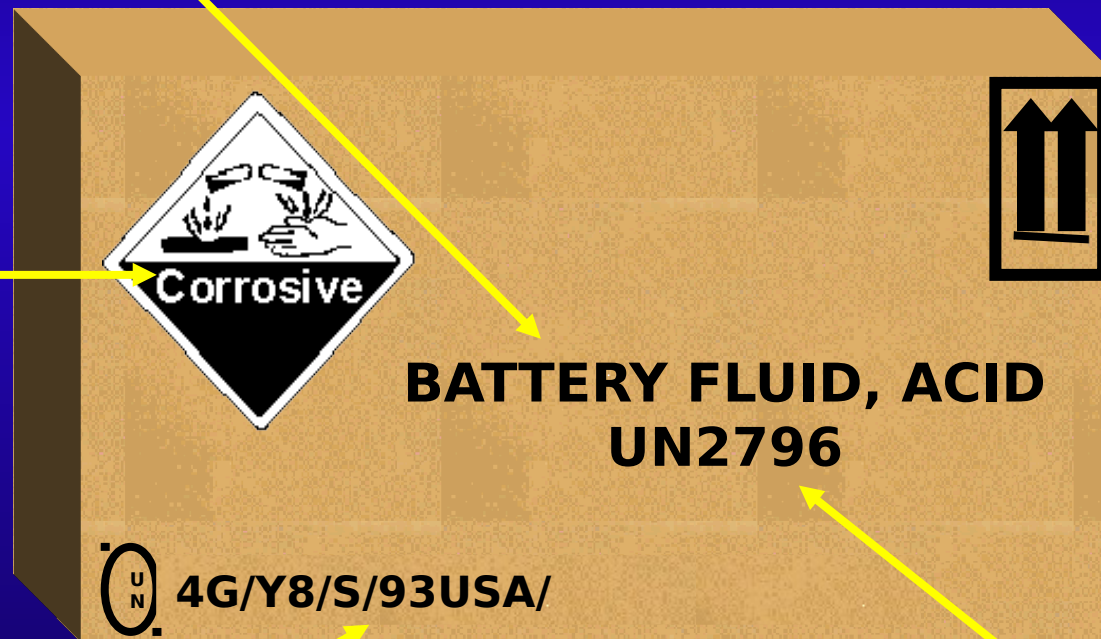


HAZMAT Marking/Labeling (Cont)

Proper shipping name

Orientation arrows

Hazardous
Label



UN Packaging No.

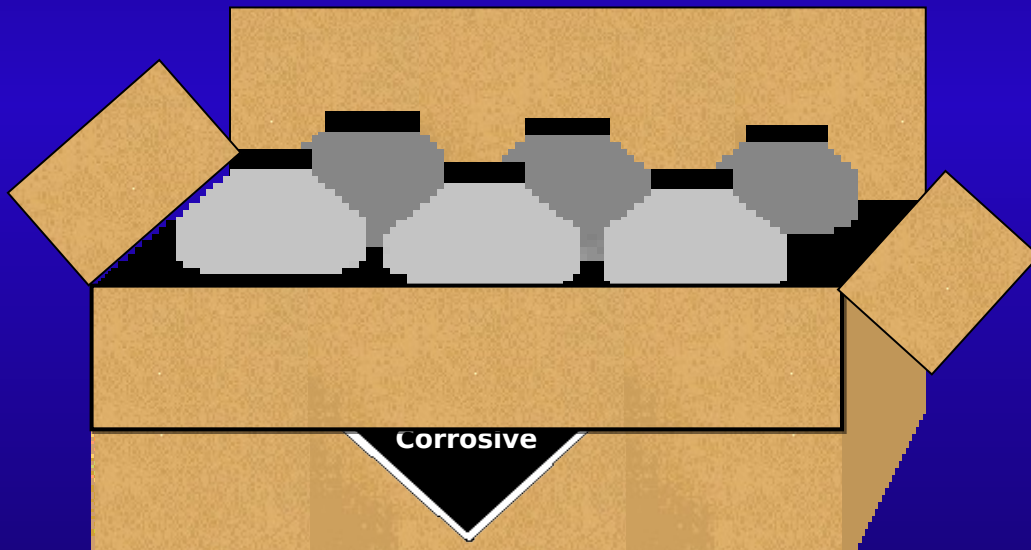
Identification number



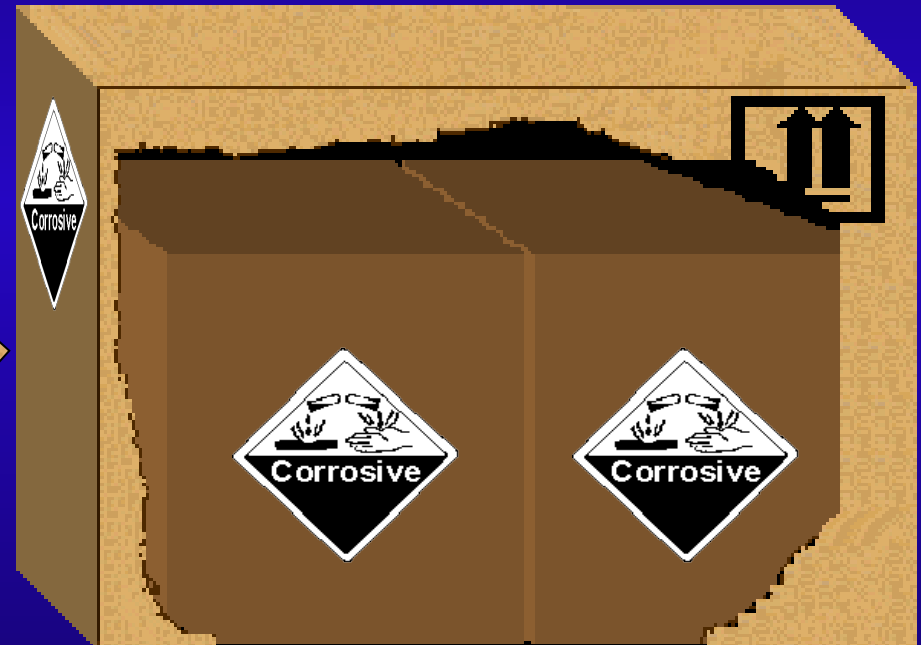
Liquid Hazardous Material



- Closures in upright position



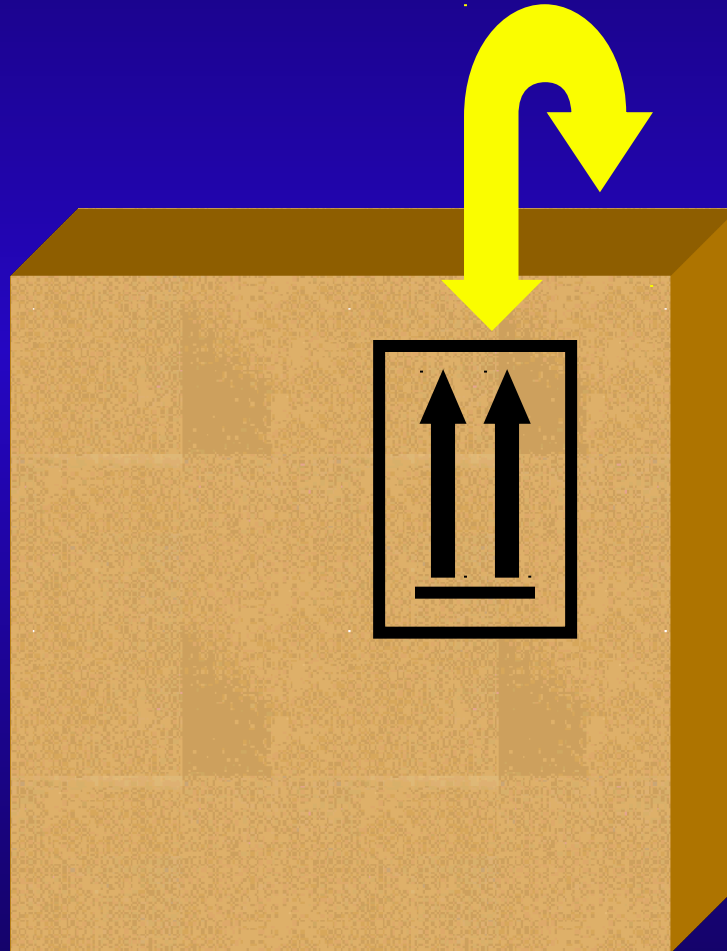
Package



Over pack



Package Orientation Arrows



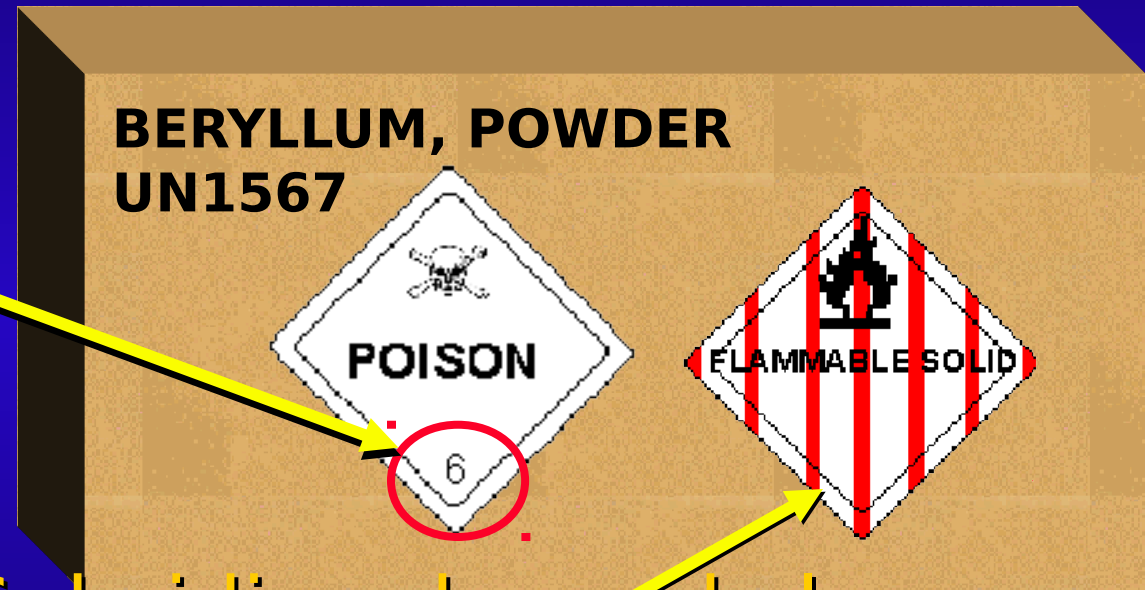
- Orientation arrows must be on two opposite vertical sides oriented in correct upright position



Subsidiary HAZMAT Labeling



- Primary hazard class label with hazard class number



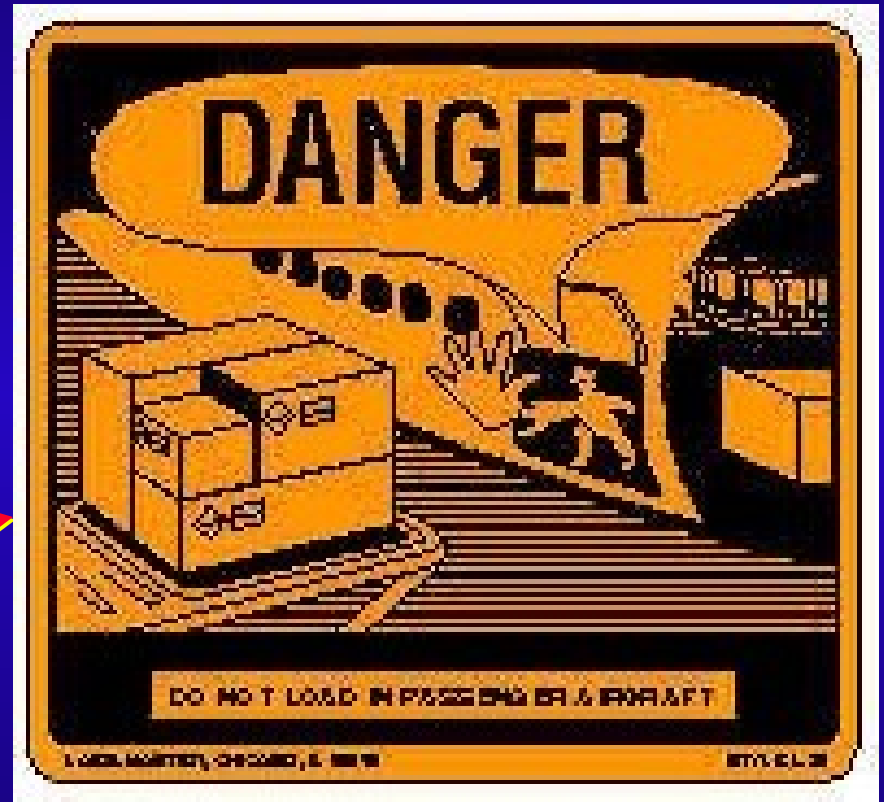
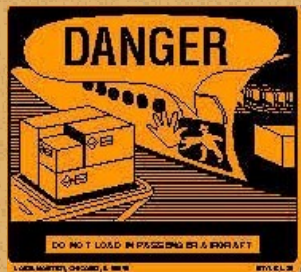
- Subsidiary hazard class label without hazard class number



Special Labels

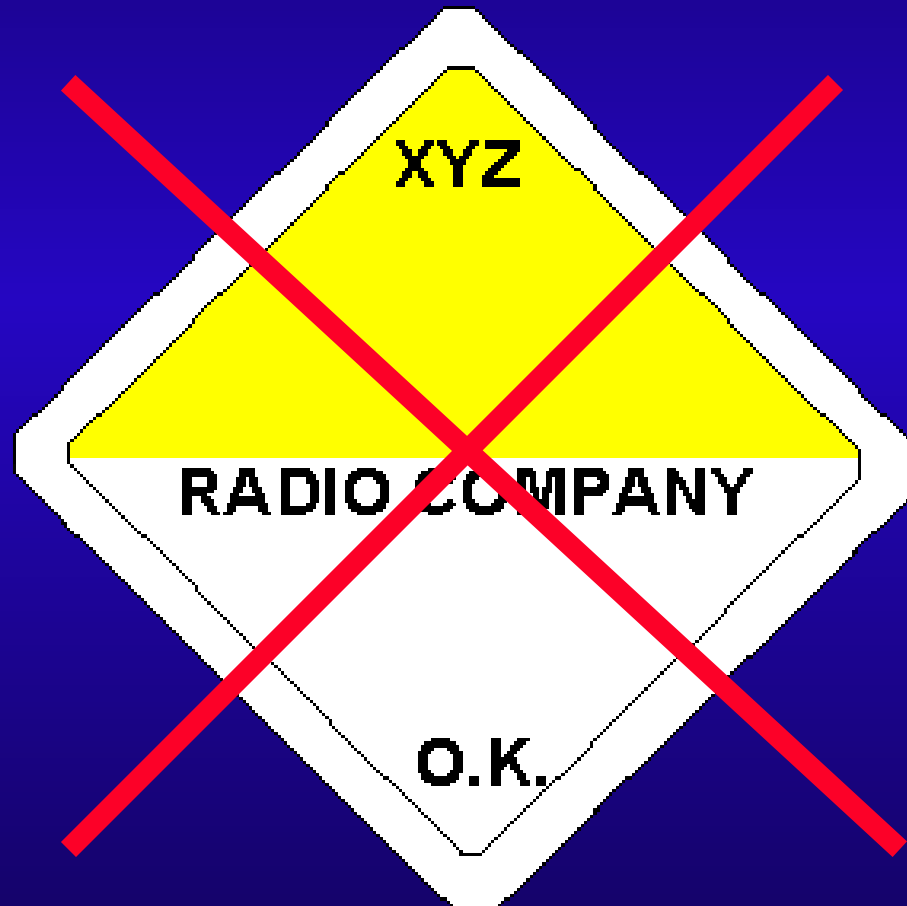


- Cargo aircraft only





Prohibited Labeling





PLACARDING TABLES

Table 1 - 172.504(e)

ALWAYS Placard no matter the amount

Table 1

1.1.....	EXPLOSIVE 1.1.....	172.522
1.2.....	EXPLOSIVE 1.2.....	172.522
1.3.....	EXPLOSIVE 1.3.....	172.522
2.3.....	POISON GAS.....	172.540
4.3.....	DANGEROUS WHEN WET.....	172.548
5.2 (Organic peroxide, Type B liquid or.....)	ORGANIC PEROXIDE.....	172.522
solid, temperature controlled).		
6.1 (inhalation hazard, Zone A or B).....	POISON INHALATION HAZARD.....	172.555
7 (Radioactive Yellow III label only).....	RADIOACTIVE ¹	172.556

¹RADIOACTIVE placard also required for exclusive use shipments of low specific activity material and

Surface contaminated objects transported in accordance with §173.427(b)(3) or (c) of this subchapter.



PLACARDING TABLES

Table 2

<1001 lbs

Table 2

1.4.....	EXPLOSIVE 1.4.....	172.523
1.5.....	EXPLOSIVE 1.5.....	172.524
1.6.....	EXPLOSIVE 1.6.....	172.525
2.1.....	FLAMMABLE GAS.....	172.532
2.2.....	NON-FLAMMABLE GAS.....	172.528
3.....	FLAMMABLE.....	172.542
Combustible liquid.....	COMBUSTIBLE.....	172.544
4.1.....	FLAMMABLE SOLID.....	172.546
4.2.....	SPONTANEOUSLY COMBUSTIBLE.....	172.546
5.1.....	OXIDIZER.....	172.550
5.2 (Other than organic peroxide, Type B,.....)	ORGANIC PEROXIDE.....	172.552
6.1 (PG I or II, other than Zone A or B.....)	POISON.....	172.554
6,1 (PG III).....	KEEP AWAY FROM FOOD.....	172.553
6.2.....	(NONE).....	
8.....	CORROSIVE.....	172.558
9.....	CLASS 9.....	172.560

ORM-D.....95.....(NONE).....

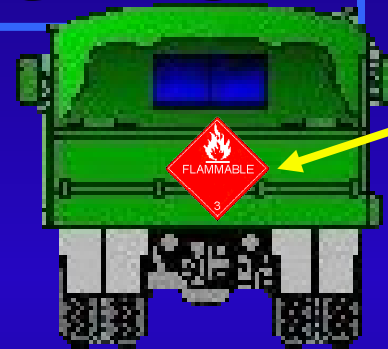


General Placarding Requirements

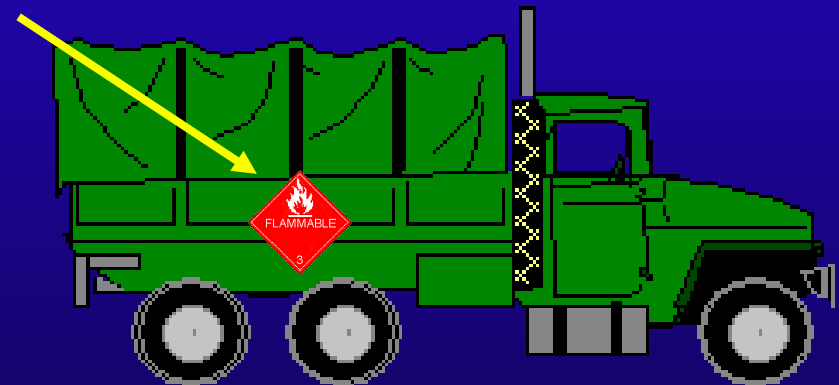
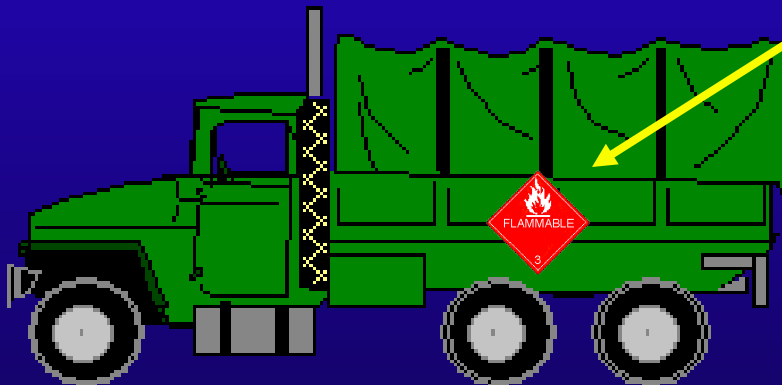
Front



Back



Both sides



Not to scale



Hazardous Material Compatibility



- Packages containing HAZMAT which might react with one another may not be stowed next to each other
- Know the Hazard Identify





Hazardous Material Compatibility (Cont)



- HAZMAT segregated by Hazard Classification
 - Flammable / Combustible
 - Corrosives (acids / bases)
 - Oxidizers
 - Compressed Gases
- Use DLA Inst 4145.11 as a guide





Hazardous Material Compatibility (Cont)



- Incompatible = “unwanted reaction”
- Incompatible mixtures may produce:
 - Heat
 - Fire
 - Explosion
 - Toxic gases/vapors





SUMMARY



USEFUL WEBPAGES

HAZMAT

- <http://www.transchool.eustis.army.mil/CDR/CDR-AppG.htm>
- http://http://63.141.231.97/cgi-bin/om_isapi.dll?infobase=net&softpage=Doc_Frame_Pg42 (DOT)
- <http://www.dac.army.mil/es/est/hc.asp> (explosives)
- <http://afpubs.hq.af.mil/pubfiles/af/24/afjman24-204/afjman24-204.pdf>

DTR

- <http://public.transcom.mil/J4/j4lt/dtr.html>



QUESTIONS

???

